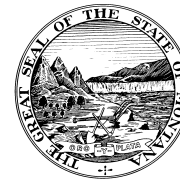




Dan Bucks
Director

Montana Department of Revenue



Brian Schweitzer
Governor

To: Revenue and Transportation Interim Committee
From: Larson Silbaugh, Economist, Tax Policy and Research
Date: February 17, 2010
Subject: A Continuously Increasing Threshold Circuit Breaker

At the December meeting of the Revenue and Transportation Interim Committee, the Department was asked to provide information on a single property tax circuit breaker program. The following memo describes one way to achieve the goals laid out during the committee discussion. There is a description, examples and cost estimates of the program.

Overview of the Program

The circuit breaker program described in this memo is based on information provided by Representative Barrett. The program follows the committee discussion held by the committee at the December 4th meeting.

This circuit breaker would be administered as an income tax credit. The credit would be equal to the amount of a portion of taxes above a threshold. The threshold is based on income. This program design would do the following:

- Remove differences in the net property tax liabilities of similarly situated taxpayers, regardless of age, homeowner status or recent change in property values,
- Eliminate “notch effects,”
- Reduce property tax regressivity,
- Simplify property tax assistance programs by consolidating into one program,
- Require that beneficiaries pay some portion of property taxes (a co-pay),
- Extend property tax assistance to renters.

The co-pay provision of the program is to insure that taxpayers have an incentive to participate in the local budgeting process. If all property taxes were eligible to be offset by a credit, then property taxpayers would have no incentive not to vote for increased property taxes because the tax increase would be passed on to other taxpayers. The co-pay parameter in this particular design is equal to 0.15, or 15%. 15% of property

taxes are not eligible to be offset by the credit, so every property taxpayer will pay at least some of the original property tax bill.

The threshold is the percentage of income that a taxpayer is required to pay in property taxes above the co-pay. The threshold portion of this design has two parameters, a and b, defined as:

$$\text{Threshold} = \text{Income} (a + b \times (\text{Income}))$$

Where $a = 0.02$ and $b = 0.0000008$, the threshold is equal to:

$$\text{Threshold} = \text{Income} (0.02 + 0.0000008 \times \text{Income})$$

For a taxpayer with an income of \$1,000, the threshold is equal to 2.08% of their income $((0.02 + 0.0000008 \times \$1,000) = .0208)$ or \$20.80 $(\$1,000 \times .0208 = \$20.80)$. For a taxpayer with \$50,000 in income, the threshold is equal to 6.0% $(0.02 + 0.0000008 \times \$50,000 = 0.06)$ of their income or \$3,000 $(\$50,000 \times 0.06 = \$3,000)$.

As you can see, as income increases the threshold increases.

The credit amount is calculated by subtracting the threshold from the property taxes above the co-pay. If a taxpayer with an income of \$1,000 has a property tax bill of \$100, then their credit is equal to \$64.20 $(\$100 \times 0.85 - \$20.80 = \$64.20)$.

Basically, the co-pay provision insures that everyone pays some percentage of their property taxes and has an incentive to participate in local budgeting decisions. The threshold increases with income, so the amount of relief is greater the lower the income.

This design uses a continuous function to define the threshold to completely eliminate the notch effects. Discrete brackets could be used and the circuit breaker would retain the same characteristics listed above.

Examples

Jeff Martin prepared a report titled "Overview of Property Tax Circuit Breakers and Descriptions of Circuit Breakers in Montana" for the December 2009 Revenue and Transportation Interim Committee meeting. That report contains examples of the existing property tax circuit breakers. The following sections are intended to compare the existing programs to the program outlined above.

Property Tax Assistance Program

Table 1 shows the differences between a continuously increasing threshold circuit breaker described above and the Property Tax Assistance Program for a residence with a taxable market value of \$100,000.

Table 1: Examples Comparing the Property Tax Assistance Program and Continuously Increasing Threshold Circuit Breaker

	Existing PTAP Program			
	Without PTAP	20% Multiplier	50% Multiplier	70% Multiplier
Income	\$26,626	\$10,650	\$18,638	\$26,625
Property Tax Due	\$1,568	\$316	\$781	\$1,097
Property Tax Savings	\$0	\$1,252	\$787	\$471
Property Tax Paid as a Percentage of Income	5.9%	3.0%	4.2%	4.1%
	Continuously Increasing Threshold Circuit Breaker			
Income	\$26,626	\$10,650	\$18,638	\$26,625
Threshold	\$1,100	\$304	\$651	\$1,100
Property Tax Due	\$1,568	\$1,568	\$1,568	\$1,568
Property Tax – Co-pay	\$1,333	\$1,333	\$1,333	\$1,333
Credit Amount	\$233	\$1,029	\$682	\$233
Net Property Tax Paid	\$1,335	\$539	\$886	\$1,335
Net Property Tax Paid as a Percentage of Income	5.0%	5.1%	4.8%	5.0%

Disabled American Veterans' Exemption

Table 2 shows the differences between a continuously increasing threshold circuit breaker described above and the Disabled Veterans' Property Tax Program for a residence with a taxable market value of \$100,000.

Notice that none of the examples show a credit under the new program. This is because of the property tax levels in relation to the income limits of the existing program. Disabled veterans would receive the same credit as everyone else based on income and property taxes. There are ways to make the program more generous for disabled veterans that are not addressed in the program discussed above.

Table 2: Examples Comparing the Disabled Veterans' Property Tax Exemption and Continuously Increasing Threshold Circuit Breaker

	Existing DAV Program				
	Without DAV	0% Multiplier	20% Multiplier	30% Multiplier	50% Multiplier
Income	\$53,000	\$42,399	\$45,933	\$49,466	\$52,999
Property Tax Due	\$1,568	\$0	\$316	\$471	\$786
Property Tax Savings	\$0	\$1,568	\$1,252	\$1,097	\$782
Property Tax Paid as a Percentage of Income	5.9%	0.0%	0.69%	0.95%	1.48%
Continuously Increasing Threshold Circuit Breaker					
Income	\$53,000	\$42,399	\$45,933	\$49,466	\$52,999
Threshold	\$3,307	\$2,286	\$2,607	\$2,947	\$3,307
Property Tax Due	\$1,568	\$1,568	\$1,568	\$1,568	\$1,568
Property Tax – Co-pay	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333
Credit Amount	\$0	\$0	\$0	\$0	\$0
Net Property Tax Paid	\$1,568	\$1,568	\$1,568	\$1,568	\$1,568
Net Property Tax Paid as a Percentage of Income	2.96%	3.70%	3.41%	3.17%	2.96%

Elderly Homeowner/Renter Credit

Table 3 shows the differences between a continuously increasing threshold circuit breaker described above and the Elderly Homeowners/Renters Credit for a \$100,000 residence.

Table 3: Examples Comparing the Elderly Homeowner/Renter Credit and Continuously Increasing Threshold Circuit Breaker			
Existing Elderly Homeowner/Renter Program			
Income	\$10,650	\$18,638	\$26,625
Property Tax Due	\$1,568	\$1,568	\$1,568
Credit	\$1,000	\$951	\$552
Property Tax Paid as a Percentage of Income	14.7%	8.4%	5.9%
Continuously Increasing Threshold Circuit Breaker			
Income	\$10,650	\$18,638	\$26,625
Threshold	\$304	\$651	\$1,100
Property Tax Due	\$1,568	\$1,568	\$1,568
Property Tax – Co-pay	\$1,333	\$1,333	\$1,333
Credit Amount	\$1,029	\$682	\$233
Net Property Tax Paid	\$539	\$886	\$1,335
Net Property Tax Paid as a Percentage of Income	5.1%	4.8%	5.0%

Extended Property Tax Assistance Program

The report presented to the December meeting does not include examples of taxpayers that benefit from the extended property tax assistance program. The qualifications for the EPTAP program are based on large increases in reappraisal value. The proposed circuit breaker would treat these taxpayers like everyone else, with the credit determined by income in relation to property tax. The new program does not have an income cap so even taxpayers that make more than \$75,000 would be eligible to receive some property tax benefit.

Table 4 shows the participation, the total tax reduction, the average tax reduction and the cost to the state for the existing programs and the new program. This is only to give an idea of how the two programs compare. The statistics for the existing programs are from the property tax assistance matrix presented at the December meeting.

Because of data limitations, the participation numbers and the classifications for each program is not completely comparable. For example, the existing Elderly Homeowner/Renter credit includes renters. The rent is not known, so when modeling the new program no renters are included. The participation and cost in table 4 is based on the modeled program. The income and property tax data was matched using the 2007 \$400 property tax refund, so that data is almost 3 years old. People have moved

so the taxpayers may not be matched perfectly with their current house. None the less, Table 4 does provide information that may be helpful when evaluating the new program.

Table 4: Comparing Existing Programs to New Single Circuit Breaker (Not Including Renters)

	Elderly Homeowner / Renter Credit	Extended Property Tax Assistance Program	Property Tax Assistance Program	Disabled American Veterans Credit	Not Currently Receiving Assistance	Total
Existing Programs						
Number	22,081	823	9,415	1,569		33,888
Total Tax Reduction	\$9,810,626	\$226,956	\$4,777,236	\$1,520,846		\$16,335,664
Average Tax Reduction	\$444	\$276	\$507	\$969		\$482
Cost to the State	\$9,810,626	\$41,492	\$824,018	\$266,683		\$10,942,819
New Program						
Number	6,055	EPTAP Eligibility Is currently being Determined for TY 2009	4,114	1,255	28,351	39,775
Total Tax Reduction	\$3,103,968		\$1,010,283	\$803,503	\$20,490,668	\$25,408,422
Average Tax Reduction	\$513		\$246	\$640	\$723	\$639
Cost to the State	\$3,103,968		\$1,010,283	\$803,503	\$20,490,668	\$25,408,422

Credit in Relation to Income and Value of Home

The following 2 figures show the credit amount in relationship to total household income and the reappraised value of the house. To make the figures more readable, 1,000 observations were randomly selected for taxpayers that would qualify for a credit. Renters are not included.

Figure 1 shows that most of the people who qualify for a credit have incomes concentrated below \$30,000. There are some taxpayers with incomes above \$30,000 that are eligible for the credit who receive a larger credit.

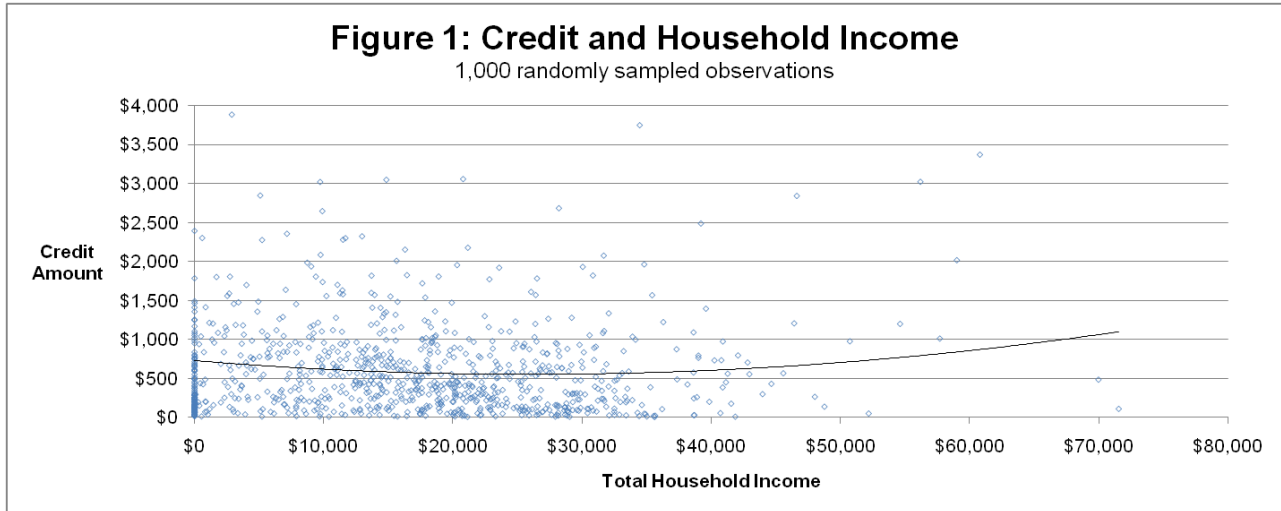
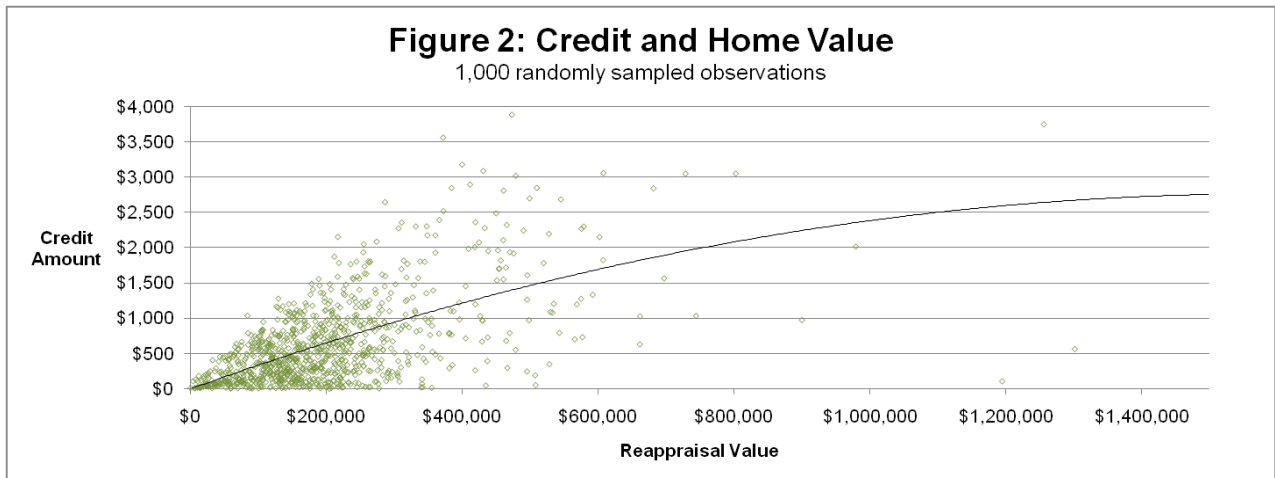


Figure 2 shows the value of the credit in relationship to the 2009 reappraisal value of the residential land and improvement. Most of the credits are awarded to homeowners that have a house less than \$250,000. Low value homes receive smaller credits because their property tax bills are smaller.



Costs

In order to estimate the cost of the new programs the income and property tax information was matched using the 2007 \$400 property tax refund. This produced 209,493 matches. It is assumed that if people moved, then the new owners have the same income as the old owners. Also, there are some PTAP and DAV properties that did not have an income match. This is either because they did not receive the \$400 refund or they are not required to file an income tax return. For estimating the cost, it was assumed that their incomes were low enough that they were not required to file an income tax return. Two incomes were used for each unmatched DAV and PTAP residence: \$0 and the median income for the DAV and PTAP programs as reported on the property tax assistance matrix produced for the December meeting. Using these

two income levels for primary residences that are missing income produces high and low cost estimates.

Table 5 shows the high and low cost estimates for the 209,493 matched observations. This cost does not represent 100% participation of owner occupied residences. The U.S. Census Bureau estimates that there are 259,490 owner occupied residences in the state of Montana, 23.9% more than the number of records with a successful match. The high and low estimates are grown by 23.9% to estimate 100% participation.

All of the analysis described has focused on homeowners. One of the objectives of the new program is to extend the property tax assistance to renters. 40.3% of the property tax benefit of the Elderly Homeowner/Renter credit goes to renters. If 40.3% of the new program goes to renters, then this will add an additional \$12,685,845 to the cost of the program. The U.S. Census publishes statistics on rents and percent of income that goes to pay for rents for non-owner occupied residences. Using this data it is estimated that the cost of including renters will be \$5,237,768.

The Elderly Homeowner/Renter Credit assumes that 15% of rent paid is for property taxes. The same assumption was used to calculate the cost for renters from the U.S. Census data.

The total cost of the program including renters and anticipating 100% participation will be between \$35,455,213 and \$44,158,168. This would have been the cost if the program had been in place in 2009. The cost is comparable to the cost of the existing property tax assistance programs presented on the property tax assistance matrix.

Table 5: Cost of the New Program	
For 209,493 Properties with Matched Income	
High Estimate	\$25,408,422
Low Estimate	\$24,395,326
100% Participation or Population Growth Based on Census	
High Estimate	\$31,472,323
Low Estimate	\$30,217,445
Estimate of Cost for Renters	
If Same Share as 2EC	\$12,685,845
From Census	\$5,237,768
Total Cost (Homeowners plus Renters)	
High Estimate	\$44,158,168
Low Estimate	\$35,455,213

The new program would replace the four existing programs. The four existing programs cost the state general fund \$10,942,819 and shifted \$5,392,845 in property tax to other properties in the state. Table 6 shows the additional cost if the existing programs are eliminated.

Table 6: Additional Cost to the State	
Total Cost (Homeowners plus Renters)	
High Estimate	\$44,158,168
Low Estimate	\$35,455,213
Cost of Existing Programs	
State General Fund	\$10,942,819
Property Tax Shift	\$5,392,845
Additional Cost of the New Program	
New Cost to State General Fund	
High Estimate	\$33,215,349
Low Estimate	\$24,512,394
New Cost to Taxpayers (accounting for elimination of tax shift)	
High Estimate	\$27,822,504
Low Estimate	\$19,119,549

Replacing the existing property tax assistance programs with the one described in the first section of this memo would have cost the state general fund between \$33,215,349 and \$24,512,394 in 2009. Because the existing programs reduce the taxable value of homes, part of the programs are financed at the local level through tax shifts. These tax shifts are often unaccounted for in analysis of the property tax system. When these tax shifts are included, the new program would have cost taxpayers an additional \$27,822,504 to \$19,119,549 in 2009.

Ways to Reduce the Costs

Adjusting the parameters of the program is one way to reduce the costs. Below is a partial list of changes to the program, as modeled, that would reduce the cost of the program:

- Increase the co-pay from 15%,
- Increase the slope (parameter b) of the threshold from 0.0000008,
- Increase the minimum threshold from 2%,
- Cap the credit,

- Make the credit non-refundable,
- Decrease the percentage of rent that qualifies as property tax, or
- Keep the participation rates at the same level as existing programs.

Conclusion

This memo has outlined a continuously increasing threshold circuit breaker. It includes a co-pay provision and the credit amount depends on income in relation to property taxes paid. The parameters used were based on information provided by Representative Barrett after the committee discussion of circuit breakers.

Examples are provided to help provide an understanding of how individual taxpayers may be treated compared to the existing programs. There are figures showing the credit amount in relation to income and home value because this may be an important consideration in evaluating the program.

The program modeled using the parameters explained above would have a total cost of between \$44,158,168 and \$35,455,213. Since the program replaces the existing programs, the additional cost to the state general fund would be between \$33,215,349 and \$24,512,394. When accounting for the tax shifts of the existing programs, the continuously increasing threshold circuit breaker would cost taxpayers an additional \$27,822,504 to \$19,119,549. All of the above costs are for 2009.